

Number of document(s): 1

Creation date: **January 13, 2014**

Created by: **Mr Mark Hornsby, Halifax-Herald-Ltd**

list of articles

Unlocking nature's secrets can have benefits for us all; Research is "great way to contribute"

The Chronicle-Herald - April 4, 2011..... 2

*The present document and its usage are protected under
international copyright laws and conventions.*



The Chronicle-Herald

NovaScotia, Monday, April 4, 2011, p. A4

Unlocking nature's secrets can have benefits for us all; Research is "great way to contribute"

John Mcphee Environment Reporter

Mark Hornsby used to be self-conscious when people came upon him peering through binoculars at a nest box on the Saint Mary's University campus.

Now he's happy to answer questions about such things as brood patches, carnosus hemapterus parasites and the behavioural ecology of the European starling.

The 21-year-old speaks with passion about his newfound world of research.

"It's very fulfilling knowing, first of all, that you're doing something that you love," Hornsby said in a recent interview at Saint Mary's biology department.

"Research encompasses pretty much every aspect that someone who loves that certain field can further explore."

Hornsby is studying whether the male European starling can figure out the extent of nest parasites just by looking at the eggs. The parasites leave blood or fecal deposits on the adult bird's brood patch, the bare patch of skin used to keep the eggs warm. The deposits are transferred to the eggs when the birds sit on them.

If there are a lot of egg spots, and therefore more parasites, Hornsby found that the male starling will start bringing more food to the nest. Interestingly, other studies have indicated that the male will reduce his visits if there's a major infestation.

"We want to find out what these spotted eggs actually are signalling to the starling," said Hornsby.

He and other members of the research team set up 45 nest boxes around campus and began monitoring the nests last May. The team included his supervisor, biology professor Colleen Barber, PhD candidate Evan Fairn of Dalhousie University, and first-year students Michael West and Allison Hudson.

Besides recording the parasite spots on the eggs, they weighed the chicks as they hatched and checked them for parasites. They banded the male and female adults in order to tell them apart and monitored their nest routine with binoculars.

"Besides learning new techniques, (it was) a lot of fun in the field, getting to deal with baby birds all summer," Hornsby said. "And once you go to

write it up, you have to do a comprehensive literature review. . . . It's almost overwhelming to fathom how many other people have done similar research but not quite the same as yours."

European starlings, as the name suggests, are not native to North America. Their population exploded after they were introduced in the 19th century.

Hornsby traced his path to Saint Mary's environmental science biology department back to a Grade 12 biology class at C.P. Allen High School in Bedford. He credits teacher Eric McIntyre for sparking an interest he didn't realize he had.

"He wasn't afraid to use a lot of humour to enhance the class. . . . You had to know what you were talking about to stay in the class."

From that first inspiration, Hornsby has found his life's work. He intends to get his PhD and find a university post that combines teaching and research.

"It's just really a great way to contribute to society," he said.

Figure:

Bird researcher Mark Hornsby checks out one of several nest boxes on the campus of Saint Mary's University. (Tim Krochak / Staff)



a solution from **CEDROM SNI**

© 2011 *The Halifax Herald Limited ; CEDROM-SNi inc.*

PUBLI-C news:20110404·HH·0Apr4new_txt0179 - Date of issue: 2014-01-13

This certificat is issued to Mr Mark Hornsby for personal and temporary display.

[Back to list of articles](#)